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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,583	11/13/2001	Guang Gao	24545B	5783
22889	7590	04/07/2004	EXAMINER	
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			JIMENEZ, MARC QUEMUEL	
		ART UNIT		PAPER NUMBER
		3726		

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/010,583	GAO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Marc Jimenez	3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 09 March 2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) 11-17 is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-10 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. It is noted that the amendment that was received on 3/9/04 (with a mail room date of 11/12/03) does not list all of the claims. For example, claims 11-17 should have been included and identified as being “withdrawn”. A complete listing of all the claims is required in the next office action to avoid a non-responsive letter.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 1-10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites “a gathering shoe positioned below said roll for gathering said fan of fibers into a strand” in the last two lines. This limitation renders the scope of the claims unclear because the preamble of claim 1 recites “A roll”. Therefore, the structural features of the roll should be defined. It is unclear how “a gathering shoe” further limits the structural features of the “roll”.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Streets et al. (5,961,685) in view of Orzel (5,781,973) and Morrill.

Streets et al. a roll **70** for applying a sizing composition to a fan of one or more fibers, comprising:

a shaft **163b**, and a sleeve **74** covering at least a portion of the shaft **163b**, wherein the fiber **14** of the fan of one or more fibers **14** contacts the sleeve **74** at an axial location of the sleeve, and wherein each fiber **14** of the fan of one or more fibers **14** lies substantially in a plane perpendicular to the central axis of the shaft **163b** at the axial location, and a gathering shoe **21** positioned below the roll **70** for gathering the fan of fibers **14** into a strand **14a**.

Streets et al. teach the invention cited with the exception of having a curved central axis and a sleeve rotatable relative to the shaft. The shaft of Streets et al. rotates with the sleeve.

Orzel teaches that it is known to use a curved central axis **30 or 32** (fig. 2) to convey one or more fibers **C** in order to spread the fibers to the desired position or known desired transverse locations as suggested by Orzel at col. 9, lines 19-21.

Morrill teaches that it is known to provide roller with sleeves **10** rotatable with respect to a shaft (col. 2, lines 16-17). The roller of Morrill also has a curved central axis.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Streets et al. with a curved central axis, in light of the teachings of Orzel, in order to spread the fibers to the desired position or known desired transverse locations as suggested by Orzel.

Furthermore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Streets et al./Orzel with a sleeve rotatable with respect to the shaft, in light of the teachings of Morrill, in order to provide a roll that can be more easily bowed to the desired curvature while maintaining rotational movement. The roll of Morrill provides better control of the curvature of the surface of the roll by using the rotatable sleeve **10**.

Regarding claim 2, Morrill teaches that the shaft **11** is fixed at one end **24** thereof, and the sleeve **10** is adapted to be connected to a drive device to rotate the sleeve relative to the shaft **11**. Regarding claims 3 and 4, Morrill teaches that the sleeve is constructed from an elastomer material, specifically rubber (col. 2, lines 14-15, "rubber-like sheath"). Regarding claim 5, Morrill teaches that the curved central axis includes an arcuate portion (see fig. 1) having a radius defining a focal point spaced from the curved central axis. Regarding claim 6, Morrill teaches that the sleeve **10** rotates about the curved central axis of the shaft **11**. Regarding claim 7, Morrill teaches that the shaft **11** includes an arcuate center portion (see fig. 1), a first linear portion **22** (see fig. 1 on the right side of roll) extending from a first end of the arcuate center portion and a second linear end portion **22** (see fig. 1 on right side of roll) extending from a second end of the arcuate center portion. Regarding claim 8, Morrill teaches that the sleeve **10** covers all of the arcuate center portion of the shaft **11** and at least a portion of the first and second end portions **22** of the shaft (note that the first and second portions **22** extend under lead

line 23 see fig. 1). Regarding claim 9, Morrill teaches a bushing 14 interposed between the sleeve 10 and the shaft 11 wherein the bushing 14 is in sliding rotational relationship with the shaft 11, and wherein the bushing 14 is affixed to the sleeve 10 such that the bushing 14 rotates with the sleeve 10 around the shaft 11. Regarding claim 10, the bushing is affixed to a drive device via shaft 11 because an interior surface of the bushing 14 is supported.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to have provided the invention of Streets et al./Orzel with the particulars of the roll as claimed in claims 2-10, in light of the teachings of Morrill, in order to provide a roll that can be more easily bowed while maintaining rotational movement to convey material over the surface of the sleeve.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Interviews After Final***

8. Applicant note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing) to clarify issues for appeal requiring only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations will be denied. See MPEP 714.13 and 713.09.

***Contact Information***

9. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer

Service at (703) 306-5648, or fax (703) 872-9301 or by email to

CustomerService3700@uspto.gov.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is **703-306-5965**.

The examiner can normally be reached on **Monday-Friday, between 5:30 am- 2:00 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

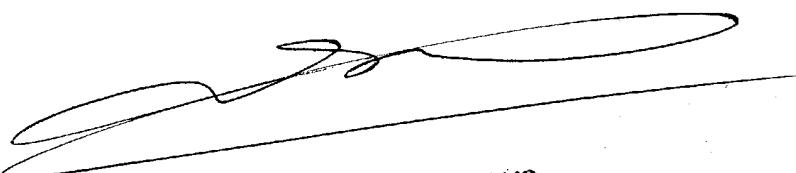
Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
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Drawing Corrections/Draftsman	(703) 305-8404/8335
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If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	<a href="http://www.uspto.gov/">http://www.uspto.gov/</a>

  
MJ  
April 5, 2004

  
PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700